

# EUROPE'S COAL EXIT

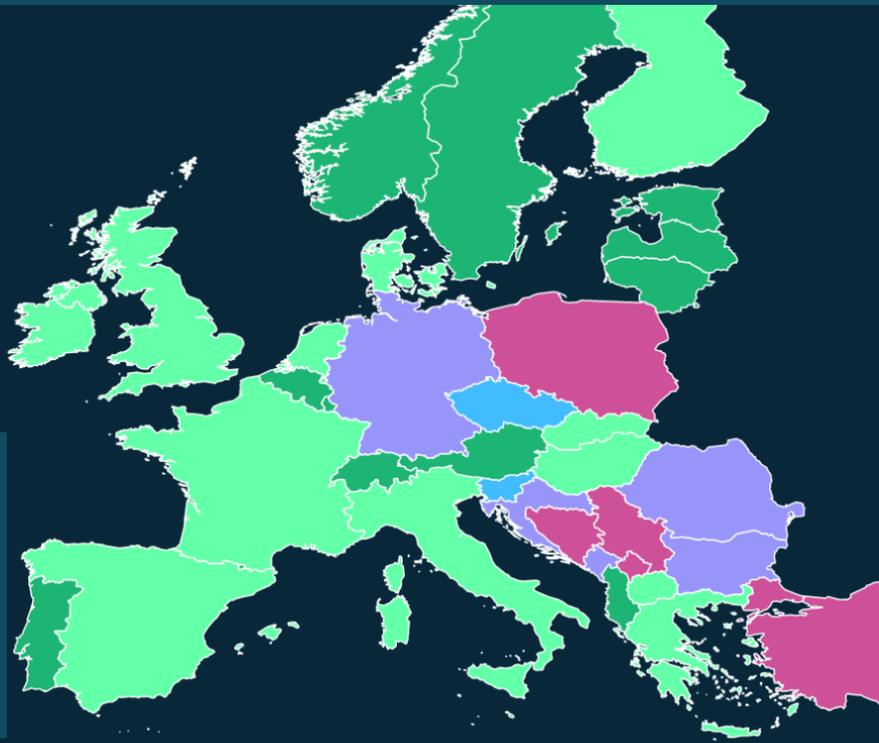


## OVERVIEW OF NATIONAL COAL PHASE OUT COMMITMENTS

Last updated 24 November 2021

This document provides an overview of country coal phase out announcements and plans in Europe. Once governments announce a coal phase out they then need to set about implementing it which means confirming closure dates at plant level, and producing plans for a managed just transition away from coal. These actions need to be in line with climate, environmental and health responsibilities, and must address the needs of affected workers, communities, and regions. To be in line with the UN Paris Climate Agreement European and OECD countries need to be coal-power free by 2030 at the latest.

### 21 EUROPEAN COUNTRIES HAVE ANNOUNCED THEY WILL PHASE OUT COAL



- Coal phase out announced for 2030 or earlier
- Late coal phase out (after 2030)
- Coal phase out under discussion
- No official coal phase out discussion
- No coal in the electricity mix

### TIMELINE OF COUNTRY COAL PHASE OUT PLANS



### BREAKDOWN OF COUNTRY COAL PHASE OUT PLANS

No coal ever in the energy mix



Coal free since Paris Agreement



Coal free by 2030



Coal free after 2030



Coal phase out under discussion



No coal phase out discussion



Coal phase out under discussion



No phase out plan or discussion



No coal ever in the electricity mix



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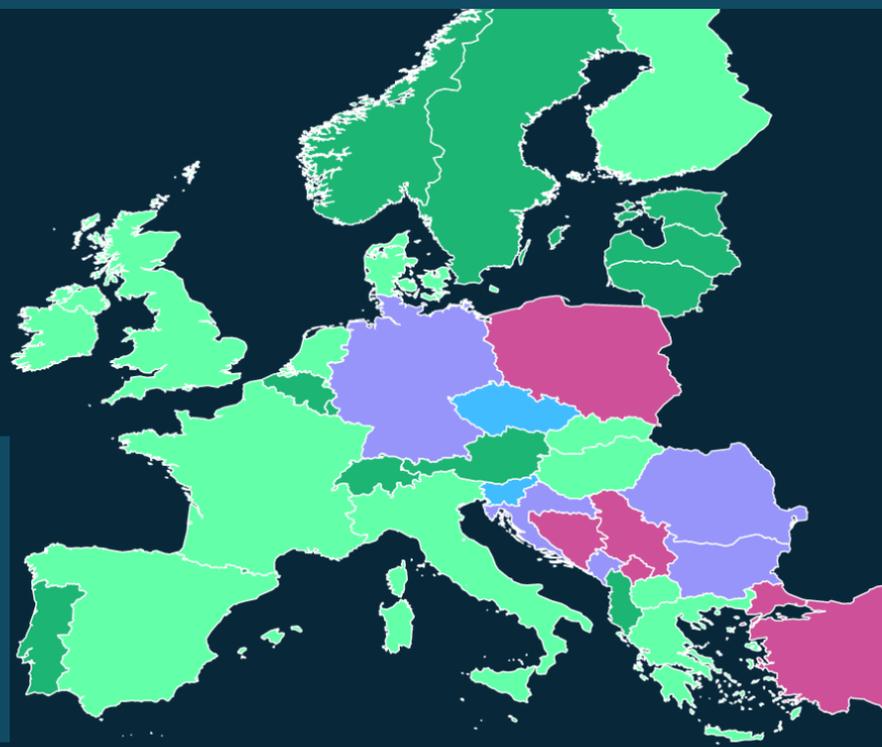


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# TIMELINE OF NATIONAL COAL PHASE OUT DEVELOPMENTS

## 2015

The United Kingdom becomes the world's first country to announce a coal phase out (2025).

Belgium becomes the first formerly coal-burning country in Europe to go coal free.

France's president François Hollande announces a plan to phase out coal by 2023.

## 2016

The operator of Austria's last coal plant without a closure date announces a plan to close it by 2025.

The Finnish government announces a plan to ban burning coal to produce energy by 2030. It's passed into law in 2019.

France's President Emmanuel Macron brings the country's coal phase out forward to 2022. It's later enacted under the country's 2019 energy and climate law.

The operator of Sweden's last coal plant announces a plan to close it by 2022.

## 2017

Italy's government presents a national energy strategy with the aim of phasing-out coal by 2025.

Denmark joins the Powering Past Coal Alliance, thereby committing to phase out coal by 2030.

The Netherlands' incoming government announces a plan to phase out coal by 2030. It's passed into law in 2019.

Portugal's Minister for Environment announces a plan to phase out coal by 2030.

## 2018

Ireland joins the Powering Past Coal Alliance, with plan to phase out coal by 2025.

The operator of Austria's last coal plant brings its planned closure forward to 2020.

Portugal's prime minister, António Costa, announces a plan to bring its phase out forward by seven years to 2023.

## 2019

Greece's prime minister Kyriakos Mitsotakis says his country will phase out coal by 2028. Greece's only coal operator, PPC, swiftly announces plans to close all its existing plants by 2023, leaving only leaving only its under-construction Ptolemaida V coal plant scheduled to burn lignite until 2025.

Hungary's president, János Áder, announces a plan to phase out coal by 2030.

Slovakia's new environmental strategy includes a plan to phase out coal by 2030.

Germany's coal commission recommends a Paris Agreement incompatible 2038 coal phase out that is subsequently passed into law in 2020.

## 2020

Austria and Sweden become the second and third countries in Europe to go coal free, with Sweden doing so two years earlier than planned.

The operator of Portugal's last coal plant without a closure date (Pego) announces plans to close it in 2021. It brings Portugal's coal phase out forward by a further two years.

The UK brings its coal phase out forward to 2024.

Hungary brings its coal phase out forward to 2025.

Denmark's last coal plant will close in 2028, thereby bringing the country's phase out date forward by two years.

Greece's only coal operator PPC brings its coal phase out forward to 2025.

North Macedonia announces a 2027 coal phase out.

Spain announces a 2030 coal phase out.

## 2021

Montenegro announces a 2035 phase out.

Coal phase out discussion begins in Croatia.

Romania announces a 2032 coal phase out in its National Resilience and Recovery Plan.

Bulgaria announces a 2038-40 coal phase out in its National Resilience and Recovery Plan.

Croatia announces it will phase out coal by 2033 at the latest at COP26.

Poland signs [Global Coal to Clean Power Transition Statement](#) at COP26, [but later claims developing country status despite being the world's 23rd biggest economy](#). Poland confirms it will maintain its desperately late 2049 hard coal phase out date. Signatories to the statement agreed that their transition away from coal should be consistent with the Paris Agreement, [which requires all European countries, including Poland, to exit coal by 2030](#).

Portugal closes last coal plant (Pego) becoming fourth European country to go coal free

# COUNTRY BY COUNTRY OVERVIEW



## AUSTRIA: COAL FREE SINCE 2020

Austria was Europe's second country to exit coal, closing its last two coal plants in 2019 and 2020 respectively. The Austrian coal phase out was not government driven. In January 2018, Austrian environment minister, Elisabeth Köstinger, announced that the country would phase out coal by 2020, but the goal was missing from the country's energy strategy published shortly after and no measures were taken to ensure it.



## BELGIUM: COAL FREE SINCE 2016

Belgium was Europe's first country to exit coal, with its last coal plant closing in March 2016. It was not an announced government policy objective, but rather resulted from the progressive closure of ageing coal plants impacted by EU pollution control regulations.



## BOSNIA-HERZEGOVINA: NO COAL PHASE OUT DISCUSSION

Bosnia-Herzegovina is still planning new coal power plants. It is a hotspot for China's exportation of coal technologies, with several coal plant projects under loan consideration by China's policy banks. The existing plants are only expected to be compliant with EU pollution laws by 2028, while the current fleet is old and in breach of existing pollution limits.



## BULGARIA: COAL PHASE OUT 2038-40

In October 2021, the Bulgarian government announced that the country will phase out coal in 2038 or 2040, in its National Resilience and Recovery Plan submitted to the European Commission. Bulgaria's coal industry is on the brink of collapse with an estimated one billion euro of upgrades required to bring it in line with EU emission standards. Bulgaria's late phase out date leaves it falling far short of its responsibilities on climate change and will delay crucial investments in renewable energy projects and retraining schemes for workers, which are needed to transition to a future without fossils. Old and polluting coal power plants are still in operation. The government relies on derogations from EU laws to keep them operating and avoids taking responsibility for just transition actions.



## CROATIA: COAL PHASE OUT 2033 OR EARLIER

Croatia joined the Powering Past Coal Alliance on 30 June 2021 as a non-declaration member with a commitment to work with the Powering Past Coal Alliance to set a coal phase out date in the near future. The country has two relatively small hard coal units, one of which was scheduled for closure at the end of 2017 to comply with the conditions under which Croatia became an EU member state. Croatian Prime Minister Andrej Plenković used his opening address at the COP26 climate meeting in Glasgow to announce that his country will phase out coal by 2033 at the latest



## CZECH REPUBLIC: COAL PHASE OUT UNDER DISCUSSION

In August 2019, a multi-stakeholder coal commission was established to assess the possibility of a coal phase out in the Czech Republic. Delayed by the Covid-19 pandemic, in December 2020, the commission finally recommended a 2038 coal exit, but the government is yet to formalise a date. Environment and climate organisations are calling for a phase out of all coal power plants by 2030 without compensating the coal industry, and the closure of all combined heat and power (CHP) plants by 2035. The challenge will be to find sustainable solutions for CHP plants without a blanket switch to fossil gas.



## DENMARK: COAL PHASE OUT BY 2028

In November 2017, Denmark became one of the first signatories to the Powering Past Coal Alliance, declaring it would work to phase out coal by 2030. All Danish coal plants now have individual closure dates, the latest being Nordjylland, which is scheduled to close in 2028. In 2017, Ørsted (formerly DONG) became the first Danish utility to announce it will cease coal use by 2023. CEO Henrik Poulsen later used the 2019 UN Climate Action Summit to state that the company will stop using coal from 2022 onwards. The only other remaining operational combined heat and power (CHP) plant, Fyns, will close in 2022.



## FINLAND: COAL PHASE OUT BY MID 2029

Following a year-long period of pressure from civil society groups to end coal, in October 2018, the Finnish Government [introduced a legislative proposal to ban the use of coal in power generation after May 1, 2029](#), which the parliament [adopted on 27 February 2019](#). While the phase out falls short of the 2025 date argued for by Finnish NGOs, the law includes the establishment of a €90 million fund for energy companies that opt to end burning coal by 2025. Unfortunately, half of this money will be diverted away from supporting wind power and will be made available for biomass to substitute coal in combined heat and power plants. However, the other half will go to better renewable solutions.



## FRANCE: COAL PHASE OUT 2022

In November 2016, France [committed to a coal phase out by 2023](#) at COP 22. [President Macron's administration later reaffirmed France's commitment](#) to exit coal, by bringing the phase out forward to 2022. In June 2019, [agreement over the coal phase out](#) legislation was reached, which was enacted through the [energy and climate law in November that year](#). The law contains an emission cap (0,7 kt eqCO<sub>2</sub>/MW on an annual basis for power plants emitting more than 0,55 t eqCO<sub>2</sub>/MWh), which will become effective on 1 January 2022, and is supposed to make coal power plants unprofitable. Unfortunately, this leaves the door open for low running hours of coal plants beyond that date, or the unsustainable conversion to a mix of coal and biomass. However, with all but one of France's coal plants announced to close by 2022, this loophole only concerns the Cordemais coal plant where there are plans to co-fire it with biomass.



## GERMANY: COAL PHASE OUT 2038

In July 2020, the German [coal power exit law](#), as well as a law that provides support to coal regions for the transition, was adopted. The first law stipulates a coal exit by 2038 with an option to forward it to 2035 and creates the basis for the retirement of an assumed 40 coal plants with a capacity of 23 GW by 2030 in addition to retirements that were announced already. We assume that about 15 coal plants with a capacity of nearly 19 GW are meant to operate after 2030, making the law incompatible with the UN Paris climate agreement [1.5 degrees C requirements](#). A public-private contract between the German government and the lignite industry, still to be signed, is supposed to grant 4.35 bln EUR in compensation to operators for closing down their lignite business. The compensation is still subject to approval by the state aid department of the EU Commission.

According to German civil society organisations and former coal commission members, the law is substantially weaker than what was proposed by the multi-stakeholder government coal commission, which had [presented its final report](#) in February 2019. The criticism centres on the slowness of the exit, that it does not foresee the rescue of the villages threatened by lignite mining, the non-linear phase out pathway of lignite plants, allowing the new coal plant Datteln IV to come online, the massive overcompensation for the coal industry for uneconomic and late coal plant closures, and subsidies for coal-to-gas/biomass switching. Many factors are in play that will force Germany to exit coal in the power sector [faster](#). This was evidenced in December 2020, when a set of three younger hard coal plants unexpectedly won in the first auction to determine hard coal power retirements. As a result, we added it to the list of plants that are to retire before 2030, which shows that a quicker phase out of German hard coal capacity is realistic.

In a landmark [German supreme court ruling](#), the German government was required to strengthen its 2030 climate targets in order to account for intergenerational climate equity. While the measures to be able to reach those climate targets have yet to be agreed, a coal phase out by 2030 has become inevitable because the power sector will have to contribute much of the early emission cuts. Following Germany's September 2021 elections, the SPD, Greens and FDP entered into coalition negotiations and produced a consultation paper which establishes that a coal phase out by 2030 is an ideal scenario, but without referring to concrete steps. Two solutions to overcome dependence on coal are mentioned: a massive expansion of renewables and the construction of hydrogen-ready fossil gas-fired power plants.



## GREECE: COAL PHASE OUT 2025

At the United Nations Climate Action Summit in New York in September 2019, Greek prime minister Kyriakos Mitsotakis announced that Greece will close all of its lignite power plants by 2028. The following December, operator PPC decided to cease operating all of its existing lignite-fired power plants by 2023. That left just its under-construction Ptolemaida V plant to operate until 2028. However, in April 2021, PPC announced that it would cease burning lignite at Ptolemaida V in 2025, citing rising carbon permit prices as the reason for the decision. With Ptolemaida V not scheduled to enter service until 2022, doubts persist as to whether it will ever burn lignite at all, meaning Greece's coal phase out could yet be brought forwards again. Unfortunately, a conversion to fossil gas is being considered for Ptolemaida V. With its huge potential for renewable energy, Greece must ensure that the transition away from coal is one towards 100% renewables. Western Macedonia is a priority under the European Union's new Coal Regions in Transition Platform.



## HUNGARY: COAL PHASE OUT 2025

In September 2019, at the United Nations Climate Action Summit in New York, the president of Hungary János Áder [said that the country will stop using coal to produce electricity by 2030](#). In March 2021, at the Powering Past Coal Alliance's global summit, Hungary [joined the Powering Past Coal Alliance](#), stating that the country would phase out coal at its last remaining lignite power plant (Matra, 884 MW) by 2025. Matra is the country's number one CO<sub>2</sub> emitter and its closure by the end of 2025, [officially confirmed](#) by the government, is reward for years of dedicated effort on the part of environmental groups in Hungary which have long advocated for its closure by 2025.



### IRELAND: COAL PHASE OUT 2025

In March 2018, the Irish minister for climate action announced that Ireland would be joining the [Powering Past Coal Alliance](#), and will [end coal power use by 2025](#). At the 2019 UN Climate Action Summit, Ireland's prime minister Leo Varadkar [confirmed this date](#). In addition, a ban on smoky coal (for domestic heating) came into full force in 2019. In July 2018, the Irish parliament [passed a bill](#) to sell the country's shares in coal, peat, oil and fossil gas, making Ireland the world's first country to divest from all fossil fuels.



### ITALY: COAL PHASE OUT 2025

In October 2017, the Italian government announced a coal phase out by 2025 as part of its National Energy Strategy. The strategy was signed the following month but is non-binding meaning Italy must [implement the phase out through executive measures](#). Italy's prime minister Giuseppe Conte [confirmed the date](#) at the 2019 UN Climate Action Summit.



### KOSOVO: NO COAL PHASE OUT DISCUSSION

With the [cancellation of the New Kosovo coal project](#), Kosovo no longer has any new coal plants in the pipeline. However, its existing plants aren't expected to be compliant with EU pollution laws until 2028, while the current fleet is old and [in breach of existing pollution limits](#).



### MONTENEGRO: COAL PHASE OUT 2035

Montenegro joined the Powering Past Coal Alliance on 30 June 2021 with a plan to phase out coal by 2035. The plan is not compatible with the Paris climate agreement, but does not need to meet the Powering Past Coal Alliance's 2030 declaration date because Montenegro is a non OECD country. With the [cancellation of the Pljevlja II new coal project](#), Montenegro no longer has any new coal plants in the pipeline. However, there are plans to retrofit its existing Plevlja I coal plant and connect it to a district heating network. In February 2020, the country introduced a [cap and trade system for its major CO2 emitters](#).



### NETHERLANDS: COAL PHASE OUT 2029

In October 2017, the [incoming Dutch government announced in its coalition pact that all of the country's coal-fired power plants will be shut by the end of 2029](#). Three of the country's five remaining plants only entered operation in either 2015 or 2016, meaning that they will operate for less than half of their expected lifetime. In May 2018, the Dutch government [announced a legal ban on electricity production from coal](#) to enter into effect on 1 January 2030, and it was passed into law in December 2019.

In December 2019, the Dutch Supreme Court [confirmed](#) the Urgenda verdict, obliging the Dutch government to reach a 25% reduction in greenhouse gas emissions by 2020 (relative to 1990). In early 2020, the Dutch government proposed 54 potential extra measures, including closing one of the three remaining coal plants ahead of the 2029 phase out date, and downscaling production. In September, the climate minister called on the operators of the plants to investigate the cost of their closures.



### NORTH MACEDONIA: COAL PHASE OUT 2027

North Macedonia became the first Western Balkan country to announce a Paris-compliant coal phase out when it joined the Powering Past Coal Alliance on 30 June 2021, opening up a new theatre in Europe's coal exit. The country's ambitious 2027 date is complemented by [plans to construct 100MW of solar renewable capacity on disused open pit mines at its Oslomej coal plant complex](#).



### POLAND: NO COAL PHASE OUT DISCUSSION

Poland's coal industry is in a dire state with its utilities having lost approximately 50% of their share price over the past five years. Despite this, they are still set to receive EUR 14 billion in coal capacity payments from the public purse, and Poland is still bringing new coal plants online and planning new lignite mines. The government plans to restructure the energy sector with a [spin-off of coal assets](#), and it recently announced that it will try to keep its state-owned coal mining company [PGG operating until 2049 using state aid](#). In both instances, the European Commission must determine whether the plans are in line with EU state aid and competition rules. Consequently, a credible coal phase out discussion on a national level in Poland has yet to start. Poland's Wielkopolska region is, however, bucking the trend, and has [committed to phase out coal by 2030](#) and achieve climate neutrality by 2040.

Poland signs [Global Coal to Clean Power Transition Statement](#) at COP26, [but later claims developing country status](#) despite being the world's 23rd biggest economy. Poland confirms it will maintain its desperately late 2049 hard coal phase out date. Signatories to the statement agreed that their transition away from coal should be consistent with the Paris Agreement, [which requires all European countries, including Poland, to exit coal by 2030](#).



## PORTUGAL: COAL FREE SINCE 2021

Two years after formally announcing plans to [phase out coal before 2030](#), the re-elected Portuguese Prime Minister António Costa used his October 2019 inauguration speech to declare that the country's last coal plant will [close by 2023](#), bringing the phase out forward by seven years. In July 2020, EDP announced it [would close its Sines coal plant in January 2021](#), bringing the Portuguese coal phase out forward for the second time. Portugal closed its remaining coal plant, Pego, in November 2021, making it the fourth European country to exit coal.



## ROMANIA: COAL PHASE OUT 2032

Romania has confirmed in its National Resilience and Recovery Plan (NRRP) submitted to the European Commission that it will [exit coal by 2032](#). The NRRP states that Romania will pass a law covering the closure and conservation of mines, reskilling of workers, and socio-economic measures to support affected coal communities by the second quarter of 2022.



## SERBIA: NO COAL PHASE OUT DISCUSSION

Serbia is still planning the construction of new coal power plants including recently revived plans to press ahead with the [350MW Kolubara B lignite project](#) with the help of Chinese partners. It is also constructing a [new unit at Kostolac power plant](#). Its existing plants are only expected to be compliant with EU pollution laws by 2028, while the current fleet is old and [in breach of existing pollution limits](#).



## SLOVAKIA: COAL PHASE OUT 2030

The [environmental policy strategy of the Slovak Republic published in February 2019](#) includes a coal phase out by 2030. In a joint statement in June 2019, newly inaugurated president Zuzana Caputova and then prime minister Peter Pellegrini announced that the country will stop burning coal to produce electricity by the end of 2023. Later that year, Slovakia also joined the Powering Past Coal Alliance. Interestingly, the country only has combined heat and power (CHP) coal plants and the Low-Carbon Development Strategy states that “the decommissioning of Vojany and Nováky [the two largest coal CHP plants] is expected in 2025 and 2023, respectively.” Moreover, there is another coal CHP plant, Teko 1, which does not have a retirement date. Slovakia needs to clarify its phase out date for coal power and heat, and it should be by 2025 at the latest.



## SLOVENIA: COAL PHASE OUT UNDER DISCUSSION

In 2015, Slovenia added the Šoštanj 6 coal power plant to the grid, which the operator wants to run until 2054. The construction of the plant was [hugely expensive and wrought with difficulties](#). In the summer of 2019, after joining the EU coal regions in transition platform, the Slovenian government tasked a consultancy with developing a national coal phase out strategy. The strategy is to be adopted by the end of 2021. In autumn 2020, the draft strategy was published proposing three scenarios: 2033, 2038 and 2042. The Ministry of Environment has commissioned an environmental impact assessment of the scenarios, analysing their compatibility with various environmental indicators. The draft of the environmental report was published in December 2020. The strategy and its environmental impact assessment are expected to enter public deliberation in spring 2021. Environmental NGOs have [criticised the proposed scenarios](#) and demand that the strategy includes a Paris-compatible 2030 scenario.



## SPAIN: COAL PHASE OUT 2030

Spain finally confirmed its long awaited coal phase out when it joined the Powering Past Coal Alliance on 30 June 2021. While Spain's 2030 end date lacks ambition, the closure of its coal plants and mines has been well under way since the government confirmed its world-leading just transition strategy in 2018. The country should now aim to have its coal exit wrapped up by 2025 at the latest.

Seven coal plants stopped operating on 30 June 2020 as they were unable to comply with stricter EU air pollution standards, which applied as of Q3/2020. In March 2020, Spain submitted its [final energy and climate plan \(NECP\)](#) to the European Commission, which implies a phase out of coal by 2030. However, closure announcements and generation trends indicate that Spain will be coal power free by the mid-2020s or even earlier.

In February 2019, the Parliament of the Balearic Islands [approved](#) a Law on Climate Change and Energy Transition that sets an end date for coal in the Balearics. The islands' last coal power plant, Alcúdia, will close by 2025 (if an interconnector cable with mainland Spain is built) and will run on low operating hours until then. With the end of hard coal mining subsidies in the EU in 2018, 25 of the 26 coal mining units scheduled to close [ceased](#) operation by 31 December 2018. This was made possible through the just transition deal the government [struck](#) with coal regions.



### SWEDEN: COAL FREE SINCE 2020

The last coal plant in Sweden was long planned to close by 2022, but in December 2019 the operator announced it would close the plant two years early, thereby making Sweden the third European country to exit coal. Sweden intends to be among the first fossil fuel free industrialised countries in the world.



### TURKEY: NO COAL PHASE OUT DISCUSSION

Turkey has the world's fifth largest pipeline of new coal power plant projects, and is yet to initiate a coal phase out discussion. One of the key players in the development of new coal in Turkey is state utility EÜAŞ, which has been trying to make lignite assets attractive for investors by offering generous state subsidies, exemptions, land allocations, and price and purchase guarantees. Retrofitting of coal plants is also widespread, expanding the capacity and lifetime of some of the country's oldest and dirtiest plants. However, Turkey's parliament unanimously voted to ratify the UN Paris climate agreement in October 2021, and President Erdogan confirmed his support for the plan, as well as a 2053 net zero target for Turkey, at the UN General Assembly. This marks a major shift in Turkey's climate policy, and effectively rules out any significant long term future for coal.



### UNITED KINGDOM: COAL PHASE OUT 2024

The UK became the first country in the world to announce a coal phase out policy, laying out the plan ahead of the 2015 Paris climate meeting. The UK government confirmed its intended regulatory approach in January 2018, but is still working on putting it into legislation. It is considering an emission limit on coal power stations from October 2025 onwards. Prime minister Boris Johnson has since brought the coal exit forward to 2024 in the run-up to COP 26. Since the UK introduced a carbon tax for power plants in 2013, installed coal capacity and coal power generation has fallen sharply. In February 2020, England decided to phase out house coal and wet wood for burning at home by 2023.